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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/044,426 03/19/98 CURETON

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EXAMINER

DIXON, T	
ART UNIT	PAPER NUMBER

2161
DATE MAILED:

03/09/01

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/044,426

Applicant(s)

CURETON ET AL.

Examiner

Thomas A. Dixon

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2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 1998.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 1998 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

DETAILED ACTION

Priority

1. This application repeats a substantial portion of prior Application No. 08/757,645, filed 2 December 1996, and adds and claims additional disclosure not presented in the prior application. Since this application names an inventor or inventors named in the prior application, it constitutes a continuation-in-part of the prior application.

Information Disclosure Statement

2. Examiner requests applicant supply copies of non-patent literature cited in the parent 08/757,645 for consideration, references were not found in the parent file.

Patents and Non Patent Literature, incorporated by reference, but not provided have not been considered.

Specification

3. The disclosure is objected to because of the following informalities:

Brief description of figure 2A1 actually refers to figures 2A1-1 and 2A1-2,
figure 2B3 actually refers to figures 2B3-1 and 2B3-2,
figures 2C1 and 2C1' are said to be feed delivery vehicles, when they appear to be feedbunk reading vehicles, or more likely, veterinarian vehicles,
figures 2D1 and 2D2, are said to be veterinarian vehicles, when they appear to be feedbunk reading vehicles, no animals are present for visual inspection,
figures 2E1 and 2E2 are said to be nutritionist vehicles, no animals are present for visual inspection

Appropriate correction is required.

Drawings

4. The drawings are objected to for the same reasons as above for the specification.

Correction is required.

Claim Objections

5. Claim 9 is objected to because of the following informalities:
the word "inform-ation" in line 3 should be spelled information.
Appropriate correction is required.
6. Claim 12 is objected to because of the following informalities:
the word "modelling" in line 9 should be spelled modeling.
Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1.

Line 40 the phrase "feedlot vehicle team" is confusing.

The phrase "and/or" in lines 59 and 62 renders the claim(s) indefinite because the claim(s) should be written using the word "and" or "or" in order to distinctly point out and claim the subject matter of the invention. These terms make it difficult to determine the scope and operation of the "information acquisition means" and the "information transmission means" of the claim.

As per Claim 2.

The term "periodically up-dated" is imprecise and renders the claim indefinite.

As per Claim 3.

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The phrase "and/or" in lines 59 and 62 renders the claim(s) indefinite because the claim(s) should be written using the word "and" or "or" in order to distinctly point out and claim the subject matter of the invention.

8. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per Claim 12.

Lines 2-3 recite a "plurality of vehicles each employing an onboard computer system which includes:" and goes on to recite the entire feedlot computer network among other elements. The specification does not support this implementation and it would seem impractical, if not unworkable.

The phrase "symbolically embedded within the feedlot" of lines 14-15 is confusing, does it refer to the actual feedlot or model feedlot.

The word "subsystem" of lines 9 and 11 are confusing, it is unclear of which system they are the sub-systems. Systems are recited for the feedbunk reading, feedmill, feed ration delivery, these systems may also, in fact, be sub-systems of the feedlot management system, but it is unclear from the claim.

The "feedlot management computer system" of line 6-7 appears to be the system of the preamble within the body of the claim, which is a circular definition and confusing.

9. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per Claim 13.

The "a method of feedlot management system for installation in an animal feedlot" of lines 1-2 is not supported by the body of the claim. The body of the claim supports the provision of a feedlot network, feedlot vehicle with onboard computer in communication with the network and driving the feedlot vehicle, but does not disclose method for feedlot management.

The "feedlot management computer system" of line 6 appears to be the system of the preamble within the body of the claim, which is a circular definition and confusing.

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by
Anderson et al (6,032,084).

As per Claim 1.

Anderson et al ('084) discloses

a feedbunk reading computer system, installed onboard a feedbunk reading vehicle transportable to each said animal pen in said feedlot, said feedbunk reading computer system including means for receiving, storing and displaying said animal health data and feed ration dispensed data, see column 8, line 63 - Column 9, line 12;

a means for producing, storing and displaying feed ration delivery data, said feed ration delivery data specifying the assigned amount of feed ration to be delivered to the feedbunks associated with a plurality of animal pens along a feeding route during a specified number of feeding cycles to be executed within a predetermined time period, and said feed ration dispensed data indicating the actual amount of feed ration delivered to the feedbunks of said animal pens during each said specified feeding cycle; a plurality of feed delivery vehicles each having a computer system, each said feed delivery vehicle computer system being installed onboard each said feed delivery vehicle and transportable to each said animal pen in said feedlot and having storage means for storing an assigned feed load, and feed metering means for metering the actual amount of feed ration delivered to the feedbunks associated with said specified sequence of animal pens, and data producing means for producing said feed ration dispensed data indicative of the actual amount of feed ration delivered to said feedbunks, each said feed delivery vehicle computer system being operatable by a feed delivery vehicle operator assigned to said feed delivery vehicle and having means for receiving, storing and displaying said feed ration delivery data provided from said feedbunk reading computer system, and means for receiving said feed ration dispensed data produced from said metering means aboard said feed delivery vehicle, see column 8, line 63 - Column 9, line 12;

a feedmill computer system, installed at a feedmill in said feedlot and having means for receiving, storing and displaying said feed ration delivery data produced from said feedbunk reading computer system, see Column 10, lines 34-39;

a feedlot management computer system, installed aboard a feedlot management vehicle, for receiving, storing and displaying said feed ration delivery data, said feed

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ration dispensed data and said animal health data, for use by a feedlot manager of said feedlot, see Column 10, lines 26-29;

a digital data communications system integrated with said feedlot computer network, for transferring digital data files among said feedbunk reading computer system, said feedmill computer system, said plurality of feed delivery vehicle computer systems, said feedlot management computer system and said feedmill computer system, wherein said digital data file contain said feed ration delivery data, said animal health data and said feed ration dispensed data, see Column 11, lines 1-64; and

a database for maintaining information representative of a model of said feedlot and objects contained therein, wherein each said computer system installed on-board each said plurality of feed delivery vehicles, includes a subsystem for viewing an aspect of said model maintained in said database, vehicle information acquisition means for acquiring vehicle information regarding (i) the position of said feed delivery vehicle relative to a first prespecified coordinate reference frame, and/or (ii) the state of operation of said feed delivery vehicle, and information transmission means for transmitting said vehicle information to said database to specify in the position and/or the state of operation of said feed delivery vehicle represented within said model of said feedlot, see column 12, lines 13-64.

As per Claim 2.

Anderson et al ('084) discloses all the limitations of claim 1.

Anderson et al ('084) further discloses vehicle information acquisition means comprises a satellite based global positioning system, and said database is periodically up-dated using said vehicle information obtained from said satellite-based global positioning system, see column 8, lines 53-54.

As per Claim 3.

Anderson et al ('084) discloses all the limitations of claim 2.

Anderson et al ('084) further discloses animal information acquisition means for acquiring animal information regarding the position of animals in said feedlot relative to second prespecified coordinate reference frame, or the body-temperature of said animals so that said feedlot model reflects the position or body-temperature of said animals, see column 4, lines 42-47, column 12, line 31 – column 13, line 28 and column 15, lines 24-26.

As per Claim 4.

Anderson et al ('084) discloses all the limitations of claim 1.

Anderson et al ('084) further discloses subsystem onboard each said feed delivery vehicle comprises

a stereoscopic display subsystem which permits the driver to stereoscopically view any aspect of said model, including the driver's vehicle as it is being navigated through the feedlot during feedlot operations, see column 14, lines 40-45 and column 21, lines 4-11.

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As per Claim 5.

Anderson et al ('084) discloses all the limitations of claim 4.

Anderson et al ('084) further discloses each said feed delivery vehicle is remotely controlled through the feedlot by an operator using a remotely situated workstation, see column 4, lines 15-23.

As per Claim 6.

Anderson et al ('084) discloses all the limitations of claim 5.

Anderson et al ('084) further discloses each said feed delivery vehicle is equipped with stereoscopic vision subsystem having a field of view along the navigational course of said feedlot vehicle, see column 3, lines 35-41.

As per Claim 7.

Anderson et al ('084) discloses all the limitations of claim 6.

Anderson et al ('084) further discloses said database is maintained aboard an Internet server operably associated with an Internet-based digital communications network, with which each said subsystem is in communication, see column 4, lines 34-41.

As per Claim 8.

Anderson et al ('084) discloses all the limitations of claim 6.

Anderson et al ('084) further discloses a replica of said database is maintained aboard each said feedlot vehicle, see column 4, lines 23-33, column 10, line 47 – Column 11, line 27.

As per Claim 9.

Anderson et al ('084) discloses all the limitations of claim 3.

Anderson et al ('084) further discloses subsystem can be used to ascertain both vehicle and animal information reflected in said model of the feedlot, see column 12, lines 31-52, and column 15, lines 20-28.

As per Claim 10.

Anderson et al ('084) discloses all the limitations of claim 1.

Anderson et al ('084) further discloses at least one workstation for viewing said model of said feedlot during feedlot operations, see column 15, lines 20-28.

As per Claim 11.

Anderson et al ('084) discloses all the limitations of claim 1.

Anderson et al ('084) further discloses at least one workstation for viewing said model of a feedlot vehicle in said feedlot and remotely navigating said feed-lot vehicle along a course in said feedlot, see column 4, lines 15-23.

As per Claim 12.

Anderson et al ('084) discloses

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a plurality of feedlot vehicles, each employing an on-board computer system, see column 3, lines 35-41 which includes:

a feedlot computer network comprised of a feedbunk reading computer system, see column 4, lines 5-14, a means for producing, storing and displaying feed ration delivery data, see column 3, lines 42-47, a feedmill computer system, see column 8, lines 7-27, a feedlot management computer system, a digital data communications system integrated with said feedlot computer network, see column 4, lines 23-41,

a feedlot modelling subsystem for maintaining a geometrical database containing a geometrical model of the feedlot and objects contained therein, see figures 2B4 and 2B5,

a coordinate acquisition subsystem for acquiring coordinate information specifying the position of the feedlot vehicle relative to a coordinate reference system symbolically embedded within the feedlot, see column 12, lines 31-52, and

geometrical database processor for processing information in said geometrical database using said coordinate information in order to update said geometrical model, see column 12, lines 52-64 and column 30-45.

As per Claim 13.

Anderson et al ('084) discloses

(a) providing a feedlot computer network comprised of a feedbunk reading computer system, a means for producing, storing and displaying feed ration delivery data, a feedmill computer system, a feedlot management computer system, a digital data communications system integrated with said feedlot computer network, see column 8, lines 63 – column 9 line 12, column 10, lines 26-39, and column 11, lines 1-64;

(b) providing a feedlot vehicle with an on-board computer system in communication with said feedlot computer network, said on-board computer system using real-time VR modelling and coordinate acquisition techniques in order to maintain a 3-D geometrical model of said feedlot and objects therein including said feedlot vehicle, see column 3, lines 35-47; and

(c) navigating said feedlot vehicle while viewing an aspect of said feedlot model from within said feedlot vehicle, see column 3, lines 35-47 .

Prior Art Made of Record

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

AU A-23642/97 is the closest foreign art, but is not applicable datewise.

McInnis "Wired – Communications advances are revolutionizing the feedlot business, is the closest non-patent literature, but is not applicable datewise.

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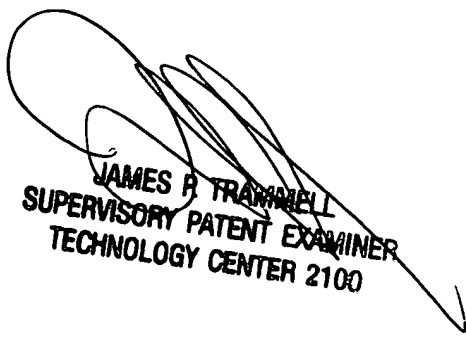
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Dixon whose telephone number is (703) 305-4645. The examiner can normally be reached on Monday - Friday 7 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (703) 305-9768. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-9051 for regular communications and (703) 305-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9700.

TAD
February 21, 2001



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